

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method for restoration of a patient's tooth which comprises:
 - generating an electronic image of a patient's tooth in a dentist's office, wherein the image includes color information representative of the patient's tooth shade;
 - designing a preliminary treatment plan for addressing the dental needs of the patient;
 - and
 - forwarding the electronic image to a dental laboratory, wherein a technician evaluates the image and, if necessary, suggests restorative options to the dentist and the dentist and the dental restoration laboratory simultaneously have access to the electronic image.
2. (Currently amended) The method of claim 1, wherein the dentist forwards to the laboratory the preliminary treatment plan along with the electronic image, ~~[[and]]~~ the laboratory technician provides feedback on the treatment plan, and the dentist and the technician simultaneously have access to the preliminary treatment plan and the feedback.
3. (Previously presented) The method of claim 2, wherein the image includes information about the patients' tooth color, the preliminary treatment plan includes a determination of at least one matching shade of material to restore the tooth, and the technician either confirms the dentist's determination of restoration material shade or suggests an alternative shade.
4. (Previously presented) The method of claim 3, which further comprises electronically storing color information representative of a plurality of tooth shades on a computer at the dentist office; and comparing the color information of the image with the stored tooth shade color information to identify one or more tooth shades having a combined color that corresponds to the patient's tooth shade before sending the identified color(s) to the laboratory.

5. (Previously presented) The method of claim 4, wherein the image of the patient's tooth is automatically compared to the stored tooth shade color information electronically by the computer.

6. (Previously presented) The method of claim 4, wherein the image of the patient's tooth is electronically displayed with color pixels to assist in determining the color of the patient's tooth shade.

7. (Previously presented) The method of claim 6, wherein the patient's tooth shade is determined by selecting one or more pixels of the image, which pixels correspond to differential spatial locations of the patient's tooth, that provide similar color information and electronically comparing that color information with the stored tooth shade color information to determine the color of that portion of the patient's tooth.

8. (Previously presented) The method of claim 7, wherein selection of the pixel(s) is repeated until a tooth shade color is determined for all spatial locations of the image of the patient's tooth, with the patient's tooth shade being determined by averaging the color information at selected pixel locations of the image before electronically comparing the averaged color information with the stored tooth shade color information.

9. (Previously presented) The method of claim 4, which further comprises utilizing a digital camera to obtain the image of the patient's tooth and utilizing the same camera to obtain the color information of the tooth shades before electronically storing the color information.

10. (Currently amended) A method for restoration of a patient's tooth which comprises:

generating an electronic image of a patient's tooth or tooth preparation in a dentist's office, wherein the image includes color information representative of the patient's tooth shade;

designing a preliminary treatment plan for addressing the dental needs of the patient; and

forwarding the electronic image to a dental laboratory by direct computer link or e-mail, wherein a technician evaluates the image and suggests restorative options to the dentist

and the dentist and the dental restoration laboratory simultaneously have access to the electronic image.

11. (Currently amended) A method for restoration of a patient's tooth which comprises:

generating an electronic image of a patient's tooth preparation in a dentist's office, wherein the image includes color information representative of the patient's tooth shade;

designing a preliminary treatment plan for addressing the dental needs of the patient; and

forwarding the electronic image and the preliminary treatment plan to a dental laboratory, wherein a technician evaluates the image and suggests restorative options to the dentist, including whether further preparation is required, and the dentist and the dental restoration laboratory simultaneously have access to the electronic image and the preliminary treatment plan.

12. (Previously presented) The method of claim 11, wherein the dentist or technician accesses an interactive website to review step-by-step procedures to determine an appropriate restorative procedure and to obtain feedback for any specific dental needs for the patient's tooth.

13. (Previously presented) The method of claim 11, wherein the laboratory technician suggests restoration materials and treatment modalities for completing the restoration of the patient's tooth.

14. (Previously presented) The method of claim 13, wherein the dentist accesses an interactive website to obtain preparation information, identify tools to carry out the preparation, or to identify sources where tools or materials for use in the restoration may be obtained.

15. (Previously presented) The method of claim 11, wherein the laboratory technician prepares a dental prosthesis; takes an image of the prosthesis; and compare the prosthesis image to the image provided by the dentist before the prosthesis is permanently placed in the patient.

16. (Previously presented) The method of claim 15, wherein the laboratory manufactures the prosthesis utilizing a plurality of porcelain coatings.

17. (Previously presented) The method of claim 15, wherein the image of the prosthesis provides color information that is compared to the image of the patient's tooth to confirm color matching.

18. (Previously presented) An interactive dental restoration method between a dentist and a dental restoration laboratory which comprises:
identifying a dental restoration need in a patient;
creating a digitized image in computer readable format of at least a portion of a tooth of the patient;
transferring the digitized image to a software program on a computer;
creating a patient file on the computer containing the digitized image;
designing a preliminary treatment plan for addressing the dental needs of the patient;
enhancing the digitized image using the software program to create an enhanced image, and
adding text information to the image;
transmitting the preliminary treatment plan via e-mail using the software program over a communications network to a dental restoration laboratory; and
directly communicating between the dentist and dental restoration laboratory over the communications network, wherein the dentist and dental restoration laboratory simultaneously have access to the enhanced digital image.

19. (Previously presented) The method of claim 18, wherein the enhancing step includes adjusting predetermined or user defined areas of the tooth image.

20. (Previously presented) The method of claim 18, wherein the enhancing step includes performing at least one filtering operation on the image.

21. (Previously presented) The method of claim 18, wherein the communications network includes the internet.

22. (Previously presented) The method of claim 18, wherein the communications network includes a direct connection between the dentist and dental restoration laboratory

23. (Previously presented) The method of claim 18, wherein the computer is a database including stored patient information for a plurality of patients.

24. (Previously presented) The method of claim 23, wherein the computer is located in the dentist's office.

25. (Previously presented) The method of claim 18, wherein the text information includes a label.

26. (Previously presented) The method of claim 18, wherein the text information includes prosthesis materials.

27. (Previously presented) The method of claim 18, wherein the design criteria includes digital image representations of dental restoration need.

28. (Previously presented) The method of claim 18, wherein the design criteria includes proposed decay excavation.

29. (Previously presented) The method of claim 18, wherein the design criteria includes tooth preparation information.

30. (Previously presented) The method of claim 18, wherein the design criteria includes prosthesis color information.

31. (Previously presented) The method of claim 18, further comprising the step of communicating a final treatment plan, including modifications to the preliminary treatment plan, if necessary, to the dentist.

32. (Currently amended) An interactive dental restoration method between a dentist and a dental restoration laboratory which comprises:
identifying a dental restoration need in a patient,

designing a preliminary treatment plan for addressing the dental needs of the patient;
transmitting the preliminary treatment plan via a communications network to a dental
restoration laboratory for evaluation by a technician, wherein the dentist and the dental
restoration laboratory simultaneously have access to the preliminary treatment plan; and
communicating a final treatment plan, including the technician's modifications to the
preliminary treatment plan, if necessary, to the dentist.

33. (Previously presented) The method of claim 32, wherein the dentist prepares
the preliminary treatment plan and the design criteria include digital image representations of
the dental restoration need.

34. (Previously presented) The method of claim 33, further comprising the step of
evaluating the preliminary treatment plan at the laboratory by the technician and making
changes before communicating the final treatment plan to the dentist.

35. (Previously presented) The method of claim 34, further comprising the steps
of implementing the final treatment plan in the patient and transmitting interim preparation
information to the laboratory for survey with confirmation prior to completing the final
treatment plan.

36. (Previously presented) The method of claim 35, wherein the design criteria
include tooth preparation and proposed decay excavation.

37. (Previously presented) The method of claim 36, further comprising the step of
communicating a confirmation or modification of the acceptability of one or more of the
proposed design criteria from the laboratory to the dentist.